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- (71) Applicant: **IMAGE THERM ENGINEERING, INC.**
[US/US]; Suite 100, 142 North Road, Sudbury, MA 01776 (US).
- (72) Inventors: **FARINA, Dino, J.**; 46 Jennings Road, Holliston, MA 01746 (US). **FALLON, Timothy, M.**; 45 Packard Avenue, Apt. 2, Somerville, MA 02144 (US). **KALOGRIANITIS, Socratis**; 50R College Avenue, Apt.

1, Somerville, MA 02144 (US). **TAYLOR, Peter**; 229 Dairyland Road, Buellton, CA 93427 (US).

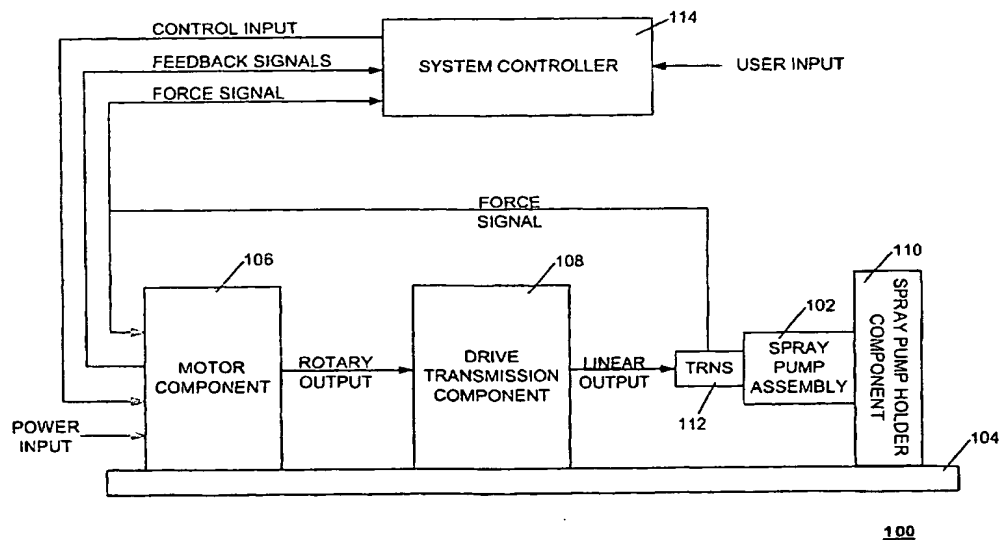
(74) Agent: **MEAGHER, Timothy, J.**; Hamilton Brook Smith & Reynolds, P.C., 530 Virginia Road, P.O. Box 9133, Concord, MA 01742-9133 (US).

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[Continued on next page]

(54) Title: PRECISE POSITION CONTROLLED ACTUATING METHOD AND SYSTEM



(57) Abstract: A system for actuating a spray pump assembly comprises a reference platform, a motor, a drive transmission, a spray pump holder, a force coupler, a force transducer, and a system controller. The motor receives a power and control input, and produces a rotary drive output. The drive transmission receives the rotary drive output and produces a linear drive output. The spray pump holder secures the spray pump assembly. The force coupler couples the linear drive output to the spray pump, and applies a force to the spray pump. The force transducer produces a force signal proportional to the force applied to the spray pump. The system controller receives a set of test inputs and provides the control input to the motor as a function of the set of test inputs. The system actuates the spray pump mechanism according to an actuation profile defined by the set of test inputs.

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